

Claims

1. Stationary blade (12) for a turbine (1), in particular for a gas turbine (1) for generating electrical energy, with a hollow
5 sectional element (22) which extends radially with respect to the rotor (3)
and which has a transverse platform (23) at each of its ends, whereby the sectional element (22) is surrounded by hot working medium (11),
10 with a hollow inset (20), located in the sectional element (22), which stretches between the two platforms (23), is a certain distance from the inside (28) of the sectional element (22) and has a base (35) which faces one of the two platforms (23),
15 with the coolant (K) flowing in radially through the other platform (23) into the hollow space (21) of the inset (20) and at least partially flowing out through baffle cooling openings (29) provided on the inset (20) aligned to the inside (28) and a recess (24) that is provided in the platform (23) located
20 immediately opposite the base (35), characterized in that the inset (20) stretches into the recess (24) so that areas with reduced predefined flow rates are present for forming a particle trap in the base area (30) of the inset (20).
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2. Stationary blade (12) according to Claim 1, characterized in that the base (35) has at least one outlet opening (31) for the coolant (K) to produce a defined pressure gradient in the base area (30).
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3. Stationary blade (12) according to Claim 1 or 2,
characterized in that

the inset (20) in the base area (30) is set at a distance from the
recess (24) so that appropriate outflow cross-sections (S1, S2, S3)
5 are available for the coolant (K).

4. Stationary blade (12) according to Claim 1, 2 or 3,
characterized in that

the recess (24) is formed as a platform penetration (39) which can
10 be sealed from the outside by means of a cover plate (32).

5. Stationary blade (12) according to Claim 4,
characterized in that

the cover plate (32) is welded to the platform (23) from the
15 outside.

6. Stationary blade (12) according to Claims 2 to 5,
characterized in that

the outlet opening (31) is a drill hole.

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7. Stationary blade (12) according to Claim 6,
characterized in that

the outlet opening (31) has a larger hole diameter than the baffle
cooling openings (29).

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8. Stationary blade (12) according to Claim 6,
characterized in that

the hole diameter of the outlet opening (31) is between 1 mm and
3 mm.

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9. Turbine (8) with a stationary blade (12) according to one of the
preceding claims.